Hangout: Sprint #1 Presentation

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Product Vision

- Society today is more merged with the internet and technology than ever before
- Hangout aspires to be a web application that people all over the country can access. Anyone with an internet connection can create an account, post events, join other people’s events, and add friends

User Stories: Epic- User Setup

- Story - As a user, I want to be able to register an account easily from the home page.
- Story - As a user, I want to be able to log into my account quickly from the home page.
- Story - As a user, I want to be able to create a profile that represents me.
- Story - As a user, I want to be able to edit my information (login, profile) easily as needed.
- Story - As a user, I want to be able to select my interests so that I can get information that is relevant to what I like to do.

User Stories: Epic- Events

- Story - As a user, I want to be able to quickly search for events based on keywords or interests.
- Story - As a user, I should be able to create an event posting that can be seen by other users on the site.
- Story - As a user, I want to be able to view other events that are posted.
- Story - As a user, I want to join an event that is posted.
- Story - As a user, I want to be able to edit an event that I have posted so that I can update it if there are any logistical changes.
- Story - As a user, I want to delete an event that I've posted in case there is a reason that the event can no longer exist.

User Stories: Epic - Communication

Story - As a user, I want to be able to communicate with people that are participating in the same event with me.

Story - As a user, I want to be able to send private messages to users so that I can further communications with other people.

User Stories: Epic - Friends

- Story - As a user, I want to have the ability to add friends and send a friend request to someone.
- Story - As a user, I want to be able to view other people’s profiles to learn more about them.
- Story - As a user, I want to be able to remove someone as a friend.
- Story - As a user, I want to view what friends I have easily so that I can communicate with them or engage in additional events.

User Stories - Michael Smith

Used to play volleyball in college, but now with his wife and kids hasn't played in a long time. Dedicated to his work and family.

Age: 32

Job: Physical Therapist

Education: Master's Degree

Family: Married w/ children

Location: Los Angeles, CA

Goals:

- Wants to start playing volleyball again
- Find a way to play that fits his schedule

Frustrations:

- Doesn't know anyone to play with
- Very packed schedule, not a lot of free time

User Stories - Jim Johnson

Starting his first semester at CSULB and doesn't know anybody at his new school. Wants to meet new people, but a lot of the currently available options for activities and groups at the school don't interest him.

Age: 18

Job: Student

Education: High School

Family: Single

Location: Long Beach, CA

Goals:

- Wants to meet new people and make friends at his new school
- Try new things that he can be passionate about

Frustrations:

- Not satisfied with the available options of social events provided by his school
- Is in a completely new environment without knowing anybody around him

User Stories - Pam Jones

Pam is a server and with her hectic work/school schedule, she finds it hard to stay motivated to get in shape. Most of her friends are just as busy as her and their schedules might not align very well. She wants to find a running buddy with the same schedule as her.

Age: 22

Job: Part-Time Student/Server

Education: Associate's Degree

Family: Single

Location: Phoenix, AZ

Goals:

- Find people in her area that she can work-out with to stay in shape
- Fit into her busy schedule a recurring event

Frustrations:

- Difficult to meet new people given the amount of responsibilities she has
- Running by herself is difficult, tedious, and scary

User Stories - Dwight Schrute

Dwight needs to sell his old DVDs of Battlestar Galactica but cannot find buyers. He could ask around or set up flyers, but being a busy paper salesman, he cannot find buyers in time. He is trying to avoid trading them in at major retailers because he feels that he will get ripped off.

Age: 40

Job: Paper Salesman

Education: Bachelor's Degree

Family: Married

Location: Scranton, PA

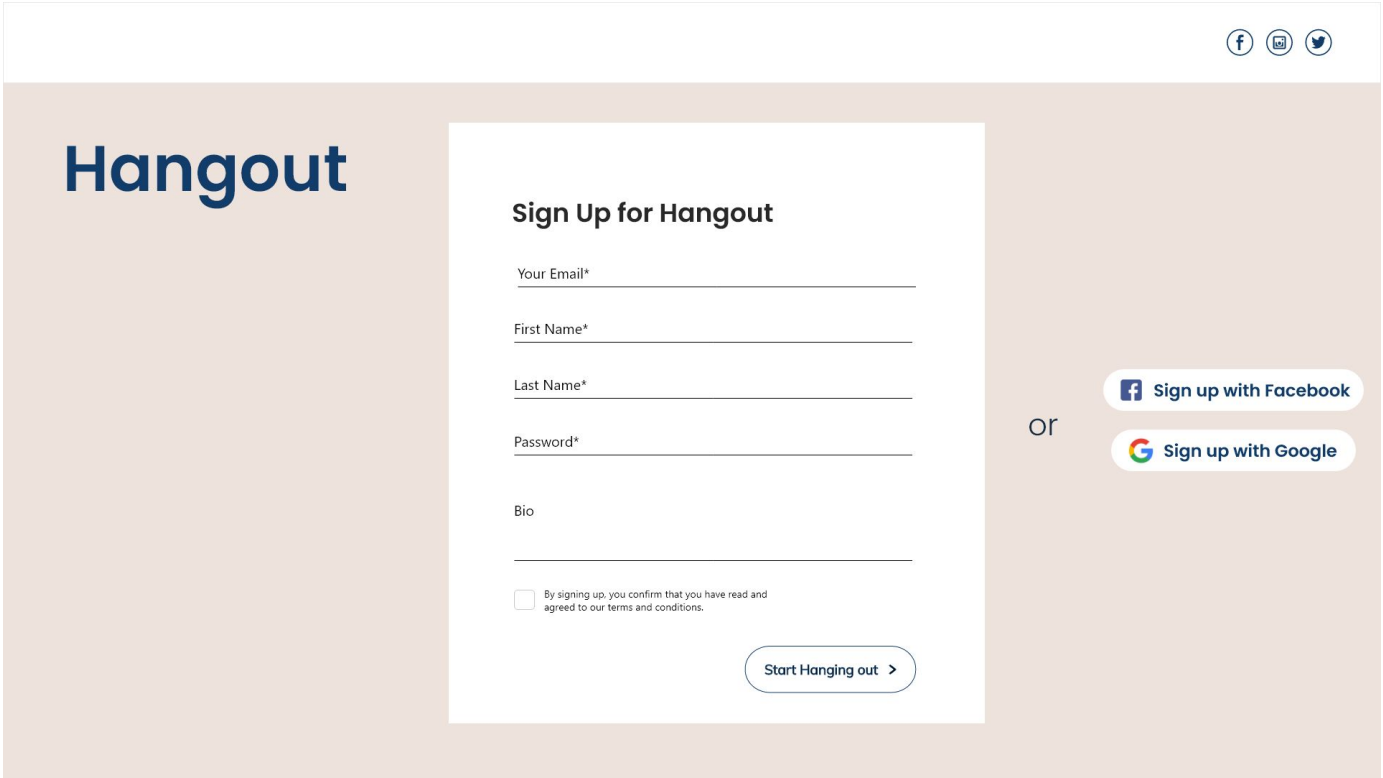
Goals:

- Sell his Battlestar Galactica DVDs
- Reach a lot of people easily
- Meet others with a similar niche interest in Battlestar Galactica as him

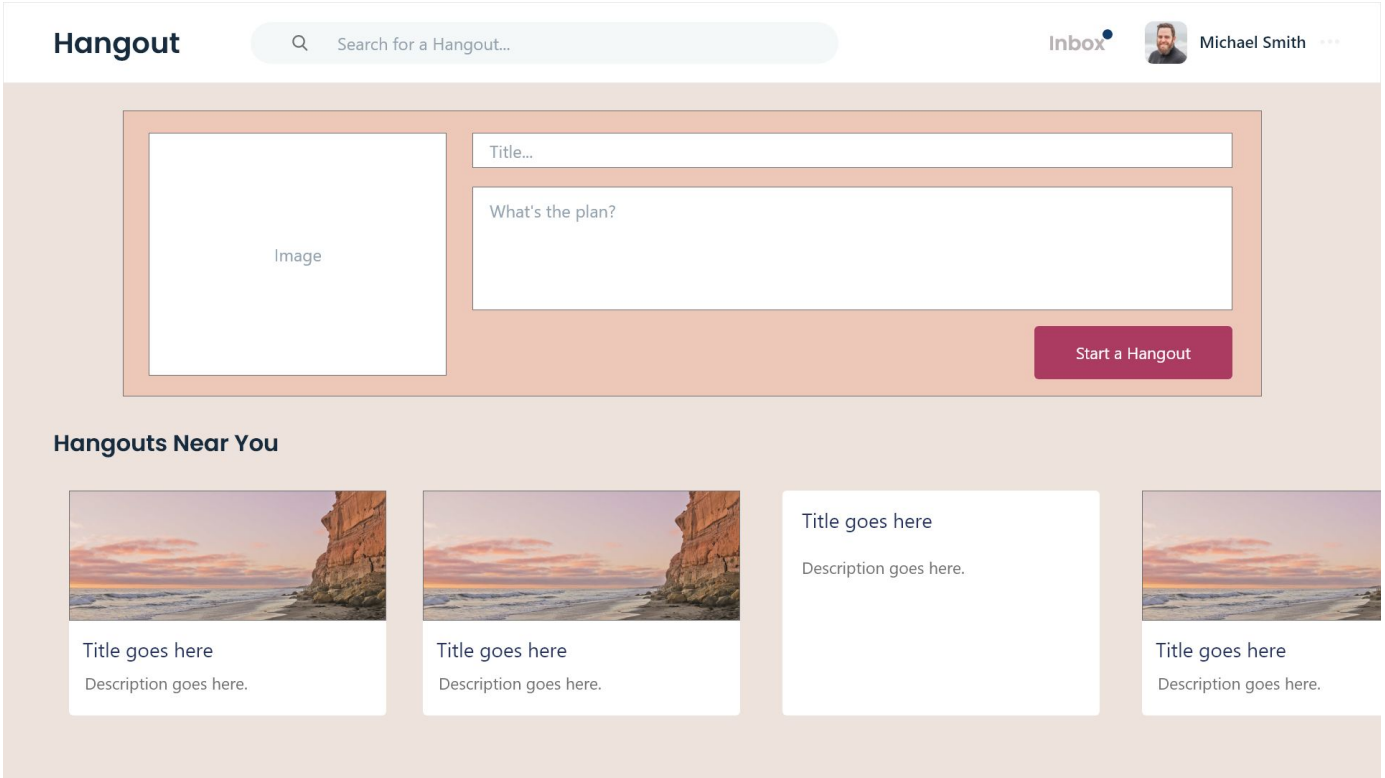
Frustrations:

- Not very many people are interested in Battlestar Galactica
- Has difficulty interacting with other people

UI Wireframes



Wireframes cont.



Non-functional Requirements

Useability

- All of the user stories and potential pathways are simple and self-explanatory for the user to easily navigate our software.

Reliability

- The product should react in a predictable way such that the user can have a consistently positive experience at all times.

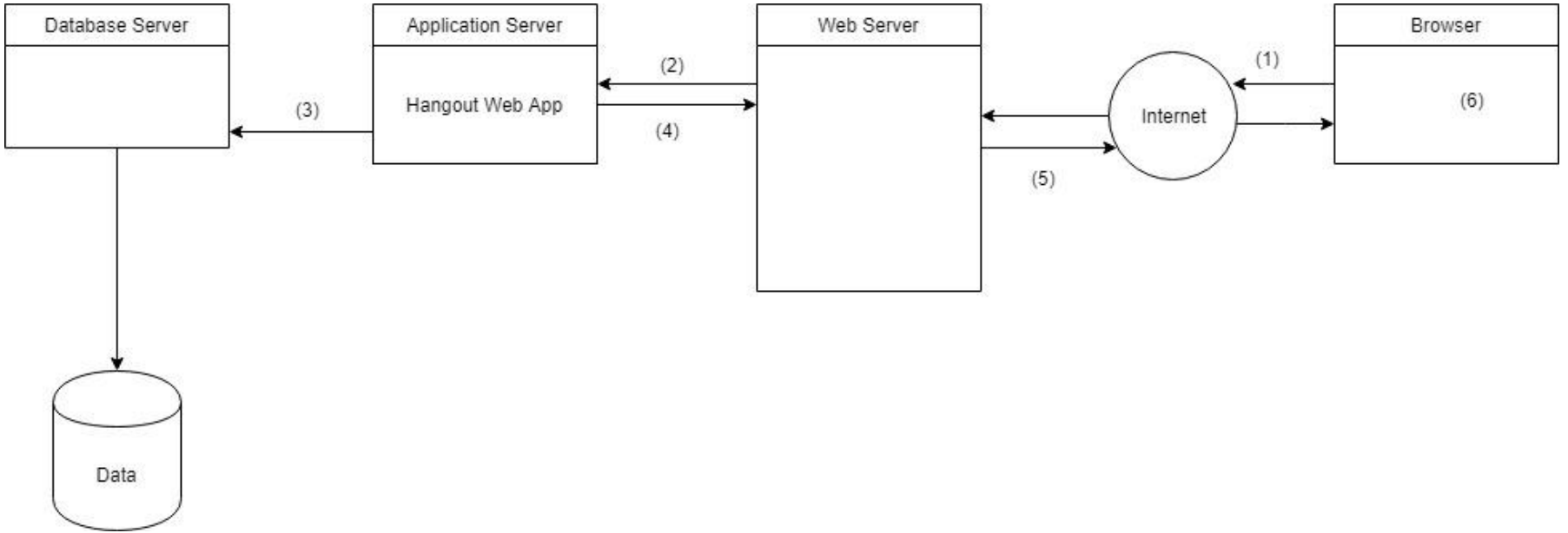
Performance

- The product should work quickly and efficiently so that people can quickly interact.

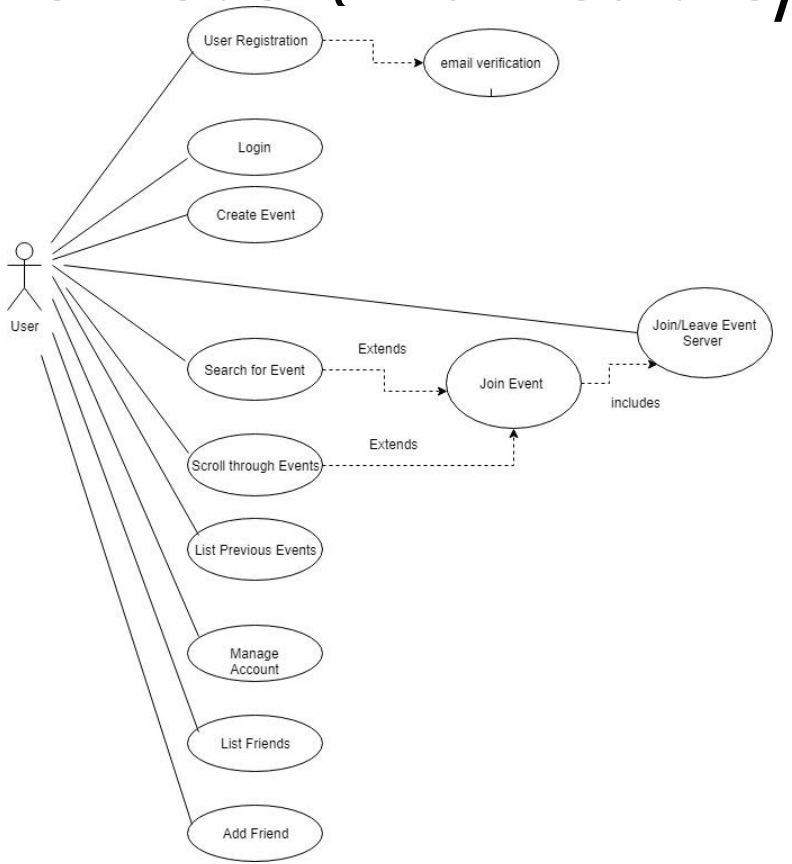
Capacity

- Ability to maintain many active users and a large database of events and profiles.

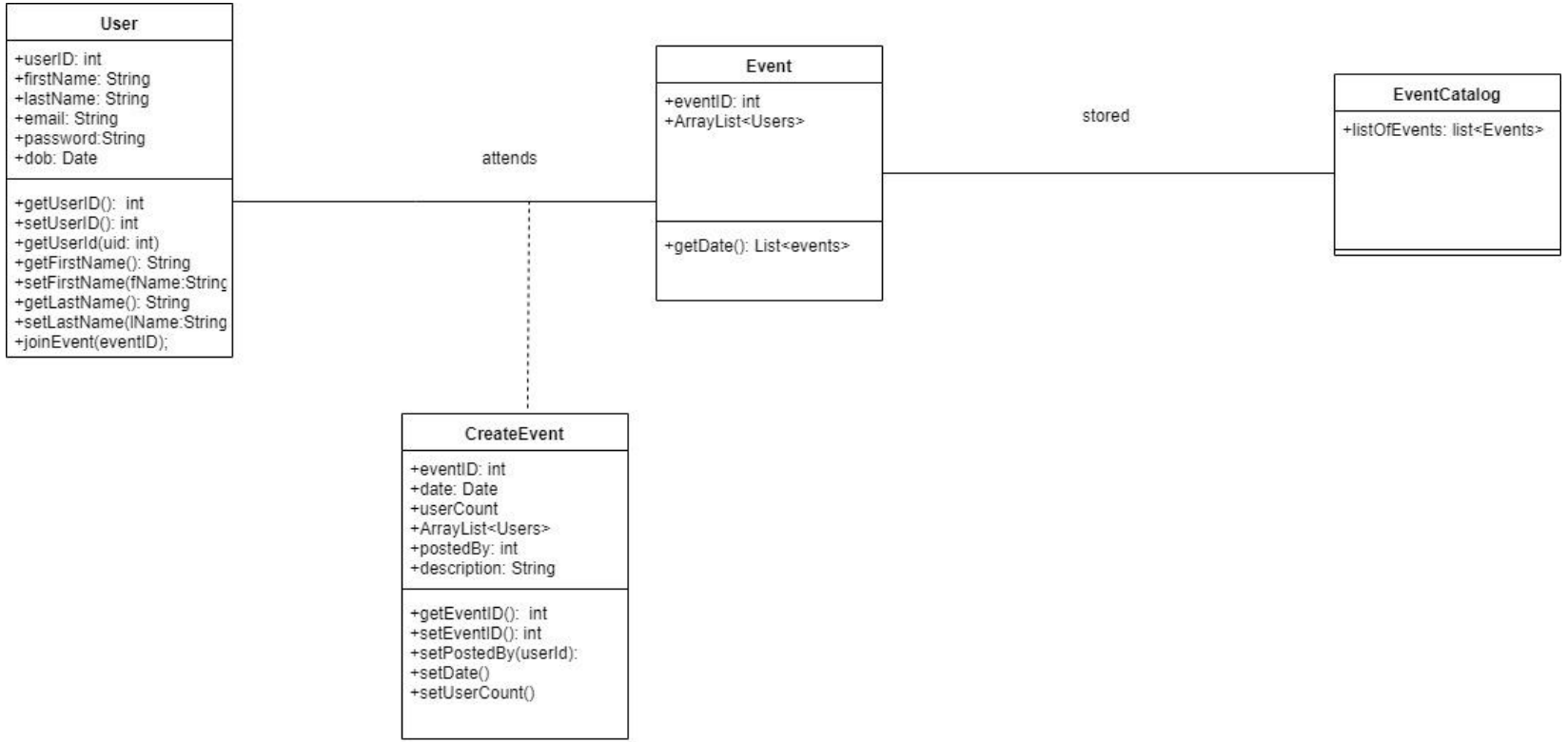
System Diagram (Architecture/Design Doc)



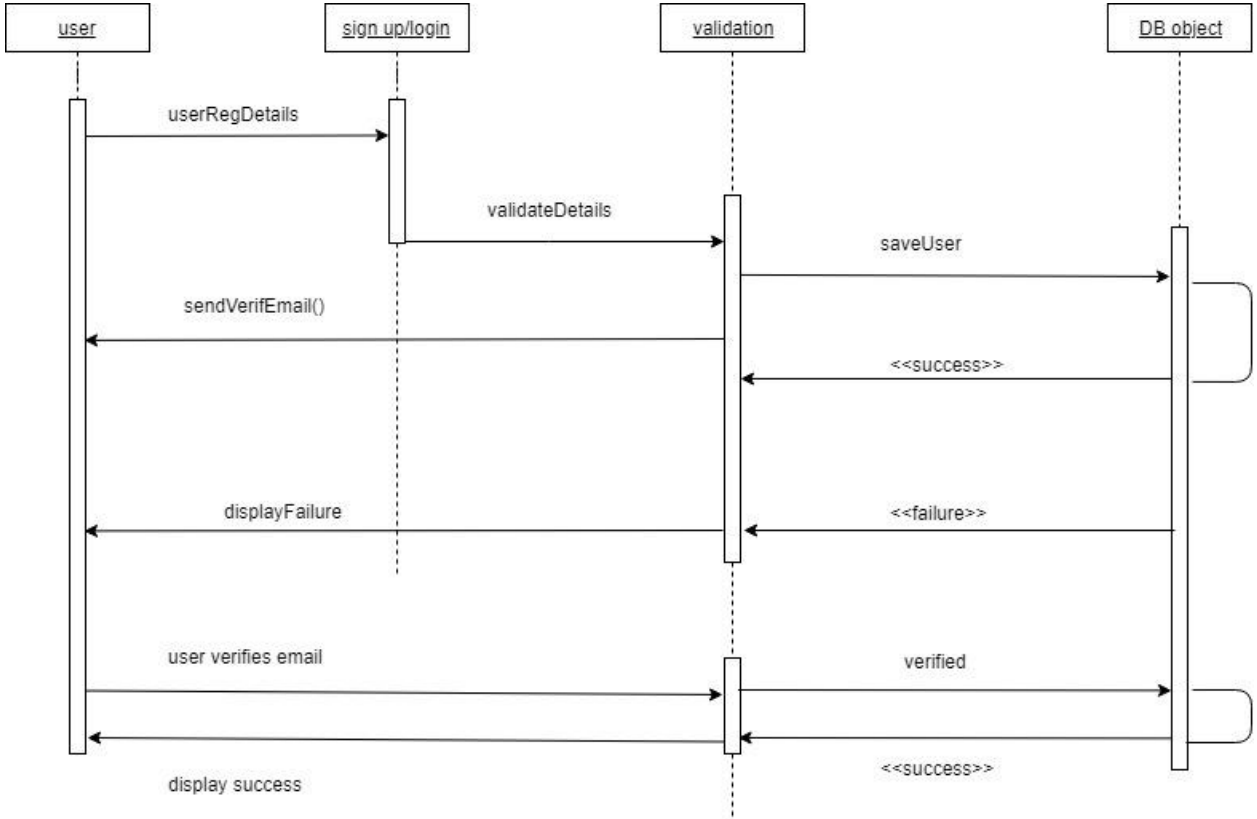
Use Case Model (Architecture/Design Doc)



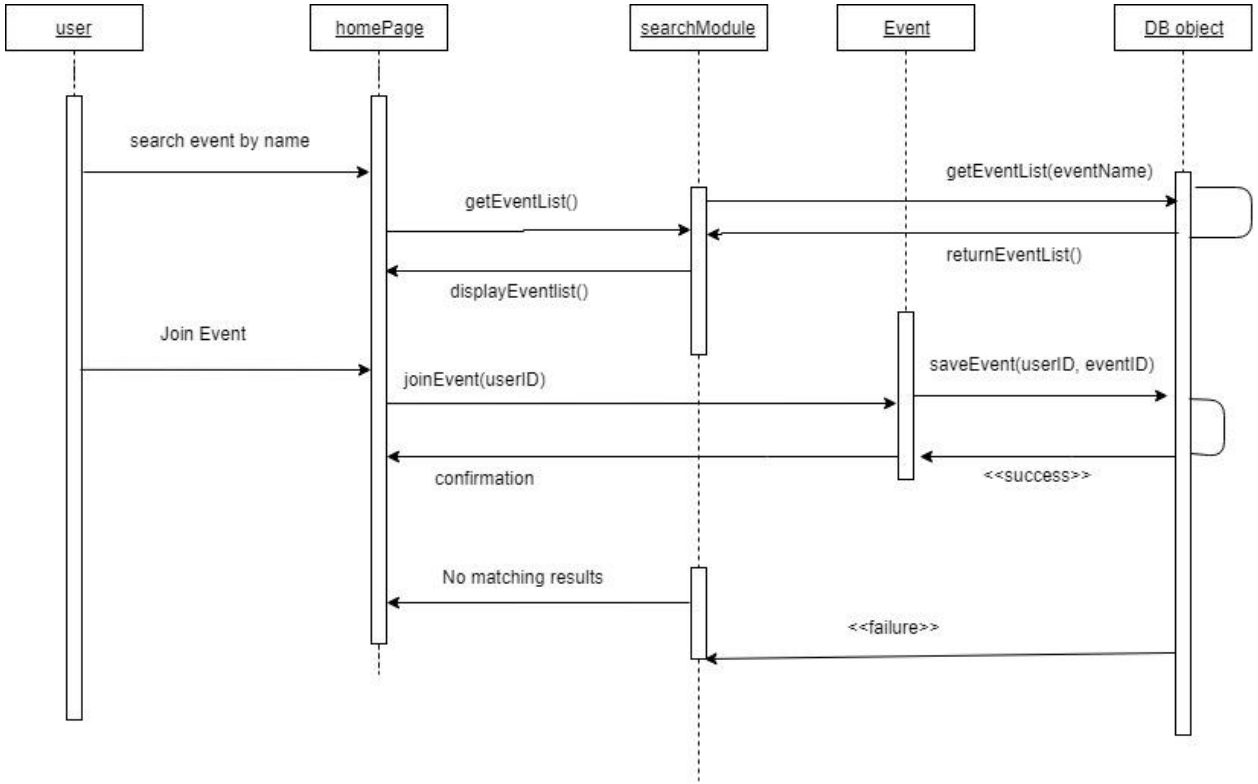
Class Diagram (Architecture/Design Doc)



Sequence Diagram (Registration)



Sequence Diagram (Search/Join Event)



Trade Off Analysis: Front End

Front end	Pros	Cons
React	Familiarity, easy to learn, Fast, supports server-side rendering, Functional programming	Less standardized, Less class based, Mixes templating with JSX logic
Angular	Supports Typescript, prebuilt npm libraries, One way data binding	Variety of structures, slower than others
Vue	Adaptable, offers strong integration tools, allows for large templates, low weight	Small market share means finding resources is harder. Less global experience as well as team experience.

Trade Off Analysis: Back End

Backend	Pros	Cons
Node	Non-blocking I/O, single language, Flexible, familiarity, JSON focused, speed	Single threaded, Complexity
PHP	Massively popular and well supported, supports relational databases	Slower, combines html with it resulting in confusion, not component modular
Java	Super familiar, powerful, cross platform	Most server plugins require payment
Linode (virtual server)	affordable, transparent, scalable, reliable, full access to server, great customer service w/ phone line support, predictable pricing, open cloud (no vendor lock in), IP address of virtual server does not change	only supports Linux operating systems
Express	most popular web framework on NPM, provides simple user authentication, allows for login using social media, opensource	single threaded framework, poor scalablity

Deploying the Machine Learning Model

- The team plans to deploy the machine learning model as a web API because it is the best fit for our product compared to its alternatives.

Alternatives

GUI

- The team expects the machine learning aspect to be running in the background. Shortening stall to increase usability.
- When needed, not constant.

Device Scoring

- Considered because placing the machine learning to the side is an appealing design for clean architecture.
- More research, it might not be best for our product.

Sprint #1 Summary

Sprint Goal: 60 hours

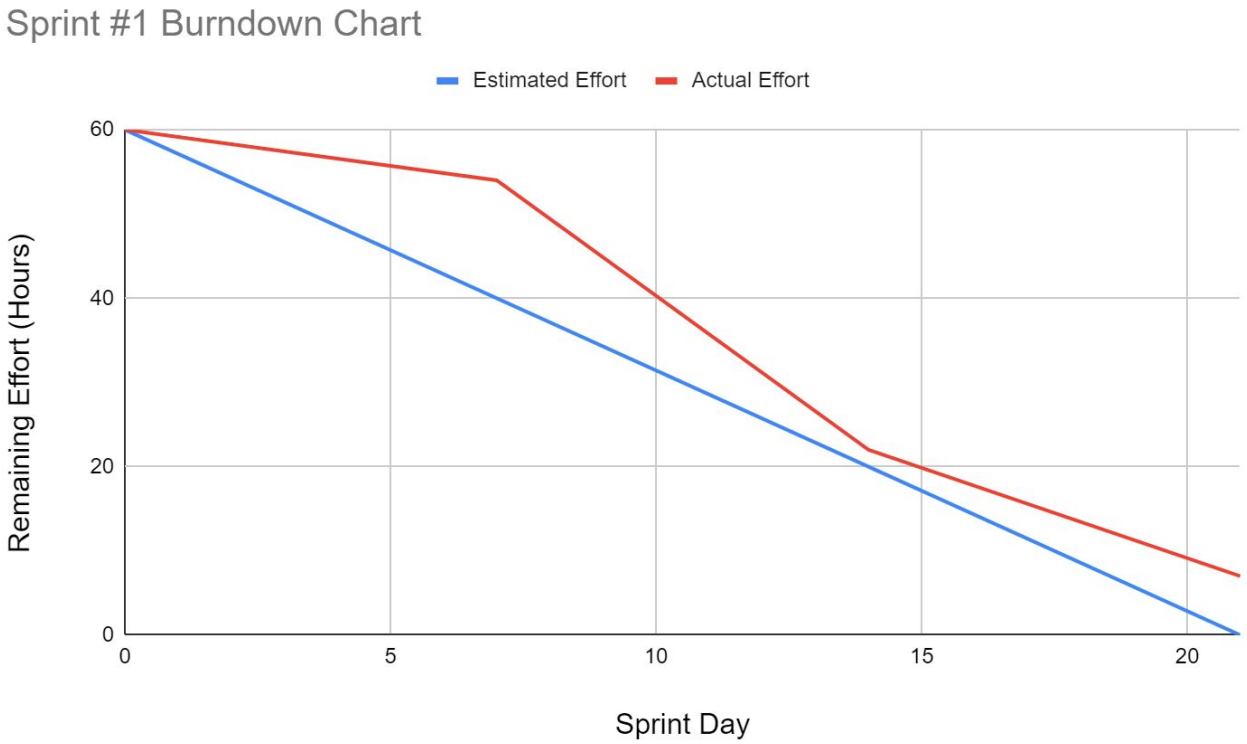
Story Points planned: 60
Story Points Achieved: 53

In progress user stories: 2

Sprint Goals

- Finish Product Requirements Document
- Finish Architecture and Design Document
  - Research Potential Backend languages
  - Research Potential Frontend languages
- Start working on establishing our backend

Burndown


Sprint #1 Burndown Chart
Estimated Effort
Actual Effort
Remaining Effort (Hours)
60
40
20
0
0
5
10
15
20
Sprint Day

Previously: Sprint #0's Retrospective

What needed improvement?

Proactivity

- Actively assigning or volunteering for tasks.
- Set small goals to work towards.

Management

- Discussing due dates.
- If a task seemed too heavy, splitting the work.

What were the commitments?

Technical Development

- Coding Stories
- Server

Product Design

- Product Requirements Document
- Architecture and Design Document

Sprint #1 Retrospective

What worked well?

- Completion of tasks.
- Maintained good team communication from the last sprint.

What needs improvement?

- Clarifying requirements.
- Sometimes a bit of confusion on where and what is needed.

What are the lessons learnt?

- Reviews
- A story is in progress until the code is evaluated.

What are the commitments in the next sprint?

- As with most of our sprints - code and its evaluation.
- Continue solidifying the wireframes.